



Eric Edgerton (left photo) described the array of continuous particle measuring technologies at the SuperSite in Atlanta for visiting air stakeholder committee members and Battelle staff.

### Air Stakeholder Committee

## Topics at Meeting: From Monitoring Activities to Future Technologies

Presentations by regional experts about air monitoring, a field trip to a SuperSite, new technology needs and innovations, and future technologies to be tested were highlights of the ETV's Advanced Monitoring Systems (AMS) Center's air stakeholder committee meeting, April 25-26, at Pine Mountain, GA.

- National air monitoring priorities were discussed by Tim Hanley of EPA's Office of Air Quality Planning and Standards (OAQPS), a member of the AMS Center's air stakeholder committee, and Connie Oldham, Tom Logan, and John Bosch of OAQPS's Emission Measurements Center. Mr. Logan is also an air stakeholder committee member.

- Danny France of EPA's Region 4 and Susan Zimmer-Dauphine of the Georgia Department of Natural Resources described the regional air toxics and ambient monitoring programs in the southeastern states.
- Eric Edgerton of Atmospheric Research & Analysis, Inc., described the continuous particle measurements of the Southeastern Aerosol Research and Characterization (SEARCH) study being conducted at the SuperSite in Atlanta. Major objectives of the study are to (1) provide a platform for testing and contrasting newer particle measurement techniques and (2) collect data to advance the understanding of atmospheric particles. Mr. Edgerton, the

project's director, conducted a tour of the site, which is located in mid-town Atlanta on land owned by the Georgia Power Company.

- Don Cortes of Air Quality Sciences described technologies that could be used to detect and reduce indoor air contaminants, such as mold and chemical irritants. He attributed most indoor air problems to volatile organic compounds (VOC). Mr. Cortes acknowledged that proven technologies to identify and characterize molds are generally not available.
- Matt Shaw of Battelle said surveillance technologies were vital to homeland security. He gave examples of commercial technologies that have the potential to detect chemical and biological agents, and described unique test

*(See Meeting on Page 2)*



The AMS Center is part of the U.S. Environmental Protection Agency's Environmental Technology Verification Program. ETV was established to accelerate the development and commercialization of improved environmental technologies through third-party verification testing and reporting of the technologies' performance. The ETV process provides purchasers and permittees with an independent assessment of the technology they are buying or permitting and facilitates multi-state acceptance. For further information, contact Helen Latham at Battelle, 505 King Ave., Columbus, Ohio 43201-2693; Phone 614-424-4062; Fax 614-424-5601; E-mail [lathamh@battelle.org](mailto:lathamh@battelle.org).

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procedures that could be used to verify such technologies.

Stakeholders received briefings from Battelle staff about the AMS Center's testing priorities for air monitoring technologies, including portable emission analyzers to detect NO, NO<sub>x</sub>, NO<sub>2</sub>, SO<sub>2</sub>, CO, and oxygen (O<sub>2</sub>) in combustion emissions; multi-metals continuous emission monitors (CEMs); ammonia CEMs; nephelometers for detecting particulate matter; and hand-held detectors of VOCs.

### Tests Underway or Planned

**Ammonia CEMs.** Several vendors are expected to participate in verification tests of technologies that detect ammonia "slip" emissions. There will be two types of tests, the first at a coal-fired power plant this summer and the second test at a natural gas-fired plant. Contact Ken Cowen, 614-424-5547 or [cowenk@battelle.org](mailto:cowenk@battelle.org).

**Mercury CEMs.** Phase 2 of this verification test is expected to begin in late June at a full-scale hazardous waste incinerator. Five vendors with six instruments are participating in the test, which is to be conducted in collaboration with the U.S. Department of Energy at its TSCA incinerator at Oak Ridge, TN. Contact Tom Kelly, 614-424-3495 or [kellyt@battelle.org](mailto:kellyt@battelle.org).

**Multi-parameter water probes.** Four vendors are participating in this test, which is to start in June in the Charleston, SC, area. The AMS Center is collaborating on the test with the National Oceanic and Atmospheric Administration's (NOAA) Center for Coastal Environmental Health and Biomolecular Research (CCEHBR) in



Ernest Bouffard of the Connecticut Department of Environmental Protection received the AMS Center's certificate of appreciation award as the most dedicated member of the air stakeholder committee during 2002.

Charleston, which will provide freshwater, salt water, and controlled laboratory sites for testing. Contact: Jeff Myers, 614-424-7705 or [myersjd@battelle.org](mailto:myersjd@battelle.org).

**Portable multi-gas emission analyzers.** This test will be conducted in June at the University of California-Riverside's College of Engineering Center for Environmental Research and Technology (CE-CERT). The test will measure the instrument's capabilities to detect NO/NO<sub>2</sub>, SO<sub>2</sub>, CO, and O<sub>2</sub> in combustion emissions. Each technology will be tested separately. Contact Tom Kelly (see above).

**Homeland security monitors.** The AMS Center is collecting information about monitoring technologies that support homeland security, i.e., air and water technologies that can detect biological and chemical agents such as anthrax, explosives, or cyanide. Contact Tom Kelly (see above).

## ETV by the Numbers

The numbers 170-30-83-138-73-800-99-96-60 may not mean much to most people, but they mean a lot to those involved in the U.S. EPA's Environmental Technology Verification (ETV) program. Here are the definitions:

- **170+**—Technologies verified to date by all ETV centers and pilots.
- **30 to 50**—Additional technologies expected to be verified in fiscal year 2002.
- **83**—Technologies currently in the testing process.
- **138**—Applications pending for verification tests.
- **73**—Percent of vendors surveyed who believe customers will be impressed by ETV verification.
- **800+**—People serving on stakeholder committees for the ETV centers.
- **99**—Stakeholder meetings conducted.
- **96**—Test/quality assurance plans developed.
- **60**—Generic protocols completed.

## Upcoming Events

### May

- 21** AMS Center's water stakeholder committee meeting, Madison, WI (to be held in conjunction with NWQMC's 2002 conference)

### June

- 16-20** Annual American Water Works Association Conference and Exposition, New Orleans, LA
- 23-27** 95<sup>th</sup> Annual Conference and Exposition of Air and Waste Management Association, Baltimore, MD

### To find more information...

- ETV: <http://www.epa.gov/etv>
- AMS Center: [http://www.epa.gov/etv/07/07\\_main.htm](http://www.epa.gov/etv/07/07_main.htm)